

KEY POINTS

▶ Brigham Young University-Idaho is student-centered and teaching-oriented. In 2010, it had 24,000 students, all undergraduates, with diverse academic qualifications. BYU-Idaho plans to continue to expand to 30,000 students by 2014.

▶ The focus at BYU-Idaho for the last several years has been to improve the quality of every aspect of the student experience—intellectual, personal, and social—and to educate students more deeply and powerfully so they can succeed in our globalized world.

▶ At the same time, the aim has been to lower the cost per student to create the opportunity to educate far more of them. BYU-Idaho adopted a year-round academic calendar and a longer academic day, and is focusing on maximizing facility and seat-utilization to reduce costs.

▶ The BYU-Idaho Learning Model is centered on principles and processes that encourage active learning and student engagement in their learning. Online and “hybrid” courses, which greatly expand on-campus capacity, are designed according to Learning Model principles.



Vision and Change at BYU-Idaho

..... **KIM CLARK** BRIGHAM YOUNG UNIVERSITY-IDAHO

Brigham Young University-Idaho currently has approximately 24,000 students, up from fewer than 15,000 in 2000 when it was Ricks College, a two-year institution. This tremendous enrollment growth, and accompanying expansion of the campus and course offerings, has been achieved with a minimal increase in operating costs and a drop in capital costs per FTE student. Kim Clark, president at BYU-Idaho, describes the innovations implemented at BYU-Idaho that have enabled it to more fully realize its mission to better educate far more students. Innovations include the use of technology to offer online and “hybrid” courses, as well as a lack of tenure for faculty and no intercollegiate athletics program. In mid-2005 Clark left his position as dean at Harvard Business School, which he had held for 10 years, to lead BYU-Idaho. Excerpts of his remarks at the Forum’s 2010 Aspen Symposium are reprinted here.

I don’t think you can find two places in the country that are as different as Rexburg, Idaho, and Boston, Massachusetts. I grew up at Harvard University. I was 18 when I began studying there and 56 when I left. That was my educational context.

I found I was in a completely different universe in Rexburg. In the first place, BYU-Idaho is an all-undergraduate school. It started out as a frontier academy and then became a very fine junior college. And just the year before I arrived in mid-2005, it had been fully accredited as a four-year school. I found, therefore, a place that was changing—where we could think differently about how to run a university and do things differently.

Second, The Church of Jesus Christ of Latter-day Saints is very deeply involved in the school. The entire faculty who teach at BYU-Idaho are members of the Church. The university has a mission to educate young people, so it’s a

teaching-centered place. It focuses on education, and we have a lot of different policies we follow to pursue that mission. I am going to share a few of those with you and the journey we have been on for the last five years.

Background

Although BYU-Idaho taught approximately 24,000 undergraduate students in 2010, they are not all on campus at the same time. BYU-Idaho runs year-round.

Some basic facts:

- The focus is on undergraduate education. There are 60 majors at the B.A./B.S. level and 20 majors at the A.A./A.S. level.
- BYU-Idaho is student-centered and teaching-oriented. Faculty scholarship is largely focused on course development and mentored student research.
- The school maintains a very strong Honor Code, reflecting the Church’s importance to the



university. In addition to academic honesty, the Honor Code addresses areas such as personal behavior, commitment to faith, and dress and grooming.

- The university employs 480 full-time faculty; about 12 percent of student credit hours are taught by adjuncts. Faculty are not tenured; they can achieve “continuing faculty status,” but everyone serves on a one-year contract. There is no differential pay across disciplines. Salary differences are based only on years of service and experience.

- BYU-Idaho has no intercollegiate athletic teams. Roughly 8,000 – 10,000 students participate in the student-led Activities Program.

number of initiatives, including three I will focus on now: a new academic calendar, the Learning Model, and online learning.

New Academic Calendar

First, the new academic calendar. When I arrived at BYU-Idaho, we had the two usual fall and winter semesters; then in the summer semester we had two split terms of eight weeks each. We decided to go to three full semesters a year and introduced what we call the three-semester, three-track admission system. There are three semesters—fall, winter, and spring. A track is a combination of two of the three semesters. We have a fall-winter track, a winter-spring track, and a spring-fall track. The university does everything three times each year. Students are admitted separately into each track, so we admit three times; we have three new student orientations where parents participate; and we have three graduations. To make this work, we had to change a fair number of things in the way the university functioned. For example, we have a large music program, and we have had to run all the major ensembles every semester. That was a big change.

Once students have been on campus for two semesters and proven that they can succeed, they can apply to attend year-round. Of the 24,000 students, we have about 1,200 who study year-round.

We also changed the academic day. Classes run from 7:45 a.m. to 5:30 p.m. In addition, we redefined the standard faculty load. Our faculty members teach a lot. The standard load is four classes a semester and 30 students per class (on average) for 120 students per semester. Faculty receive about one class a year leave and then a full-semester leave every five years or so. This procedure allows them to work on special projects.

BYU-Idaho has a mission to serve a student body of diverse interests and abilities. Our admissions approach is to set an academic standard that students must meet and a worthiness standard that has to do with their Church attendance and their participation in the faith. And then we admit those who are qualified. The minimum ACT score is 16. The minimum high school GPA is 2.0. When you look at our student body, about 20 percent of our students are in what I think of as the selective admission group. They could go anywhere. These students have very high board scores and very high grades. We have another group at the other end of our distribution where the university is a second chance for them. These students are the late bloomers. We have a reputation as being a late bloomer/second chance place where we'll take you in and work with you. BYU-Idaho is actually good at helping students figure out what they need to do and how to help them get better.

The university has an admissions index, and we have figured out how to admit students so we have balance across the



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- The institution does not have an honors program. We want all students to have the same access to university resources and to learn from each other in the same classes.

Imperatives and Initiatives

When I arrived at BYU-Idaho in 2005, as I looked at where we had been and where we were, three imperatives for the future became clear. If BYU-Idaho was to fully realize its mission, we had to improve the quality of every aspect of the student experience—the intellectual quality, personal development, and social development. Everything had to get better. We felt a responsibility to prepare young people for a very different world where they needed to be educated far more deeply and more powerfully than we had before. And so our first imperative was quality.

Second was to serve many more students. We had a mandate from the board to open our doors and grow, to serve a lot more young people.

The third imperative was to lower the relative cost. By relative cost, I mean the real resource cost per student, not tuition. For us, tuition is a decision by our Board of Trustees about how much the Church wants to appropriate to support the university and what our financial aid policies are. I was interested in the real resource cost per student, and I felt we had to lower that cost in order to create the opportunity to serve many more students.

The only way to do all three of these things at the same time was to innovate. We could not keep doing what we were doing and achieve these three objectives. And so we launched a

tracks academically. The tracks are also balanced geographically and in most other ways that we care about. That balance is important to us.

Our retention rate is about 78 percent from year one to year two. Our six-year graduation rate is about 62-65 percent, depending on the year. We're working to raise that.

These changes required a lot of discussion and debate. There were about eight different alternatives the faculty generated. This is the approach that won the most support. There was general agreement that we needed to do something like this in order to fulfill what we felt were our responsibilities, but there was a lot of consideration about how to do it.

Enrollment Growth and Costs

Our unduplicated head count has increased by more than 50 percent over the last decade. As you can see in Figure 1, enrollment has been growing and it's continuing to grow.

In 2009 enrollment was approximately 23,000. The board has approved a plan to grow the university to around 30,000 by 2014. We are on track to do that.

Figure 2 shows some of the impact of this growth on our cost structure—particularly of the calendar change, which had a huge impact.

This figure shows BYU-Idaho's total operating cost per FTE student (not headcount) in real dollars. Costs are anchored in 2000 when we were a junior college. You can see over the last decade we have added all of the upper-division courses needed for 60 bachelor's degrees, all the labs and seminars, and so forth. Our real operating cost per FTE student is about 3 percent higher than it was when we were a junior college.

I think if we did a quality-adjusted cost per student, BYU-Idaho would be below where we were when the school was a junior college. I also believe the university is poised to see this number come down a bit as it continues to grow. We have had to do a lot of investing to create the four-year school. I think there's scope to bring our operating cost per student down.

Figure 3 shows the cost of capital per FTE student. To calculate the cost of capital, we take all of the facilities on campus and value them at replacement cost. We apply a standard interest rate of about 4.5 percent. Then we apply a depreciation rate. We assume a 50-year life, and apply that to the cost of our capital infrastructure. That number is then divided by the number of FTE students.

You can see what has happened. Partly, this reflects the fact that since 2000 we have added about eight new buildings and renovated almost everything else. But BYU-Idaho's capital cost per student has declined significantly. We show a big increase in 2010 because we have 600,000 square feet of space coming online in fall 2010. Two big projects have been underway for

Figure 1.

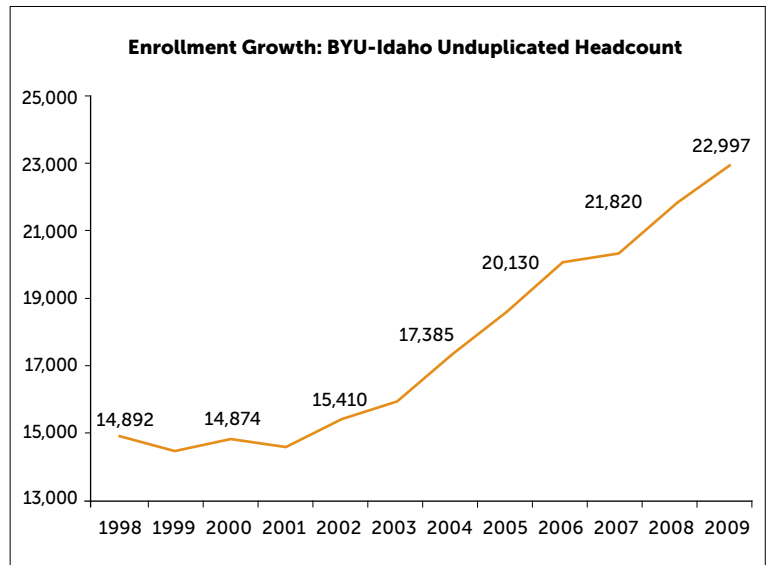


Figure 2.

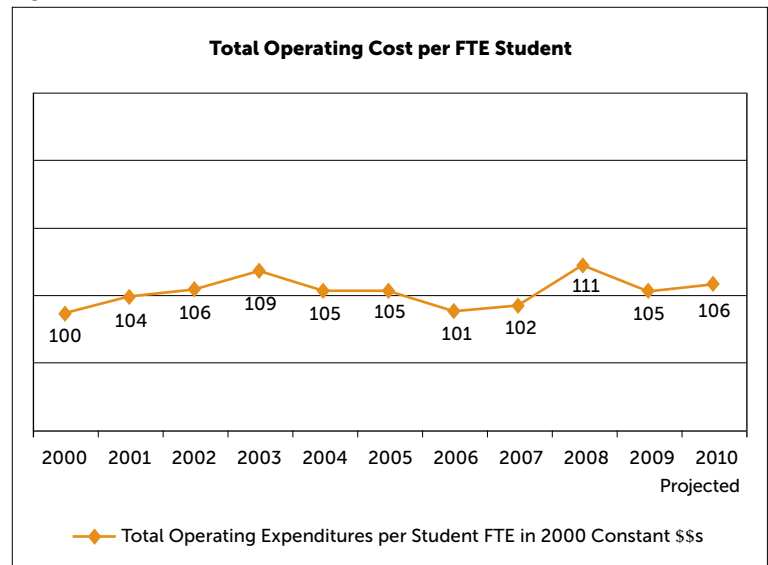
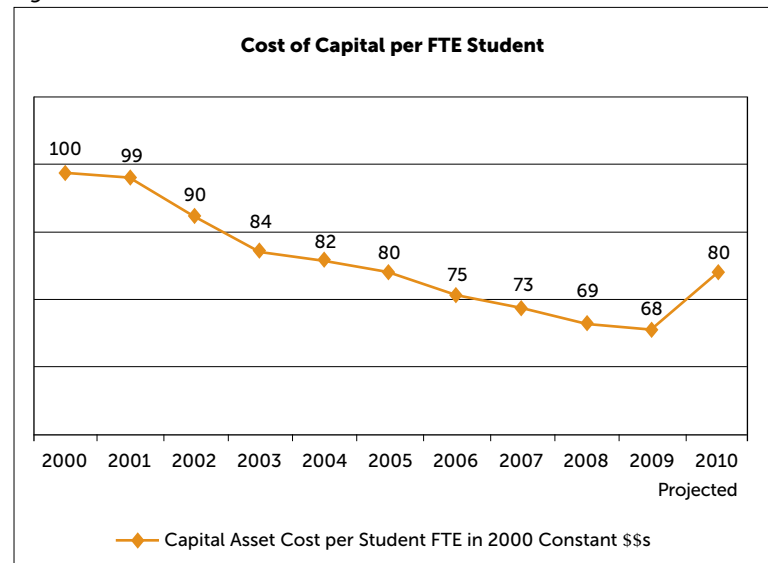


Figure 3.



the last three years and are soon going to be finished. These pop up the capital cost. But overtime we will see this number come down.

Utilization of classrooms is one thing we have discovered at BYU-Idaho that drives this number and is key to future growth. We counted to see which seats were filled in which classrooms every day. The numbers showed that we were about 70 percent utilized in rooms, and in seats we were 70 percent utilized. You multiply those numbers together to get actual seat utilization—which meant we were at about half. That number surprised everyone, because we all thought we were really efficient, fully utilized. And it turns out we were only about 50 percent utilized. That's true, even today.

Looking at the data and the difficulties associated with fully utilizing seats in rooms, we think it's possible to increase about 5 percentage points in both. But this has a huge impact on the cost of capital and on our operating cost per student. And so one of the things we've discovered is that growth is our friend. We think we can lower our costs by growing if we're careful about how we grow.

We think there is an opportunity to increase utilization through small, incremental changes. Just like managing enrollment, assignment of courses to classrooms must be carefully managed. Over the next three or four years, we will work to be 75 percent utilized in rooms and 75 percent in seats. And that will have a significant impact on our ability to grow because every one of those seats is available every hour of every class day, and that has a big impact.

The BYU-Idaho Learning Model

Our second initiative is the BYU-Idaho Learning Model. The first initiative, the new academic calendar, was driven by the desire to lower cost and serve more students. The second initiative is focused more on quality education. And so we created what we call the Learning Model.

The idea was to create a shared framework of principles—not methods, just principles—that we felt governed effective teaching and learning. The principles had to be shared across the faculty and small enough in number so that you could actually talk about them and use them. But the key was that they had to be shared and people had to really feel like we had gotten a good grasp on what drives effective learning and teaching.

So, we called a meeting of the entire faculty in January of 2006. (I had been there about six months.) We met in the ballroom around tables with about 15 people at each table. A faculty member stood up and laid out an agenda for the day, and then we gave every group several flip charts with markers. We asked, "What are the principles of effective learning and teaching?" And we let them go at it.

We received approximately 200 principles. It was amazing. Then we put a group of faculty together, and they worked for about 16 months to develop a set of five principles. We also added three process steps. That became our Learning Model.

BYU-Idaho now has a version of the Learning Model outlining its five basic principles in religious language. Here they are translated into the secular version:

All learners—including faculty and students:

- Step beyond the light they already have, pushing the edge of their current understanding;
- Seek truth and recognize the value of all sources of new insight, knowledge and understanding;
- Pursue education as a developmental experience for the whole person. (This is very important for us.) We think of education as a developmental experience. It's not just about acquiring knowledge, it is about character. It's about your whole life.)
- Act for ourselves and accept responsibility for learning and teaching;
- Respect, serve and teach each other.

These principles are combined with our three process steps, which are simply: prepare, teach one another, and ponder and prove. The idea was that faculty would take these principles and this process, design courses around it, and start to figure out what it meant. We support the faculty, and we have a lot of work going on trying to figure out how to apply these principles.

The Learning Model has profound implications. This just went into effect in the fall of 2007, so it's early, but it changes the role of the faculty member in a profound way. Faculty become designers of learning experiences in which their students act. They are not just purveyors of information or of knowledge. The university encourages active learning and student engagement in the learning process.

The second implication is that students and faculty come prepared to class. They arrive ready to learn and to teach in every class. Now, that's the ideal. (I will be the first one to tell you it doesn't happen in every class.) Students come prepared not only because they have done the homework, but they also are prepared to teach. As students engage in activities where they have to participate, they will be teaching other people.

Some people on the campus get upset with me because they claim we are having the blind lead the blind. And in some classes, I am sure that's true. But that misses an important point about this educational experience, which is that we are trying to give our students an opportunity to act. I will bet if you inspect your own experience, you will realize you learn

far more when you teach than you do when you are a passive learner. We know that. And so we teach to learn at BYU-Idaho.

We have tried to get our students away from cramming at the end of semesters and instead come to class every day prepared and to be consistent and regular in the way they approach their learning. We find that if they do that, they will be far more effective. They will be more powerfully influenced by their faculty; their experiences will be much better. As I said, there is a focus on active learning, lots of pedagogies, lots of methods. There are all sorts of things you can do to create active engagement of your students.

The last implication is that we want students to take responsibility for their own education. This is a huge change for our students. Our students often come to us with the idea that their job is to go into a classroom and be fed by the faculty. It's almost like they say they are bringing a little bucket with them to class—the faculty dispense nuggets, and the students catch the nuggets. And we say no, you actually have to be responsible for your own learning. That's a big change for our students.

Much of what we have done in implementing this Learning Model is really to engage with our students in teaching them how to take responsibility, how to prepare, and how to learn.

Online Education

It also turns out that the Learning Model has a lot of implications for our use of online education. We didn't understand that when we implemented the Learning Model; it's something we have discovered since. In a nutshell, for a number of reasons, we decided to use online courses on campus.

Our online courses are designed according to Learning Model principles. They are designed to be very engaging of the student. Therefore, we don't use the independent study model. We use a cohort, semester-based model where online courses begin exactly the same time as the on-campus courses, and students have assignments every week. They are put into a learning team of usually five students and take the course in a section of about 35-40 students. These students have an instructor who monitors their work and interacts with them. That's our model.

These instructors, who are highly trained by us, are all remote adjunct instructors. We started out with our own faculty on campus teaching online classes. Then we discovered there is a whole army of people in the world who want to

teach online. We have begun to find them and train them. Being an online instructor is a very different thing than teaching face-to-face. We have been able to develop a large number of remote, adjunct faculty to help us with these online courses.

We found them by posting the jobs online. They all have to be members of the Church, but we have had as many as 700 applications for one job. There are two typical kinds of profiles. One, a professional with many years of experience in the field, having a Ph.D. or master's degree, who really wants to teach for us but does not want to move to Rexburg. We put them through a 40-hour training program to instruct them how to teach online. We also teach them about the university. Then we manage them. Two, the other profile is Latter-day Saint women who have Ph.D.s or master's degrees. They may be married with small children. They may have been faculty and have taken time out to have kids. This is great for them because they can do their work early in the morning or late at night. They are very capable.

The university has also made a decision to develop what we call the integrated curriculum. We decided not to let our online course development become a separate activity. That is a strong tendency; there are centrifugal forces at work to do that. We decided to hook it to the campus in two ways: One, all our online courses are designed by our on-campus faculty. We have instructional designers and software developers that work with them, but our faculty are the content experts. They are the ones who design the courses. Also, it is key that our instructional designers are resident on campus and work face-to-face with the faculty. They are not remote. Two, we made the decision that all of the on-campus online courses would be exactly the same as the courses we delivered off-campus. That way, everything we do is integrated to the campus.

We also believed strongly that BYU-Idaho could increase its on-campus capacity. Our target is that by 2012, 15 to 17 percent of on-campus credit hours will be delivered online. That means that, roughly, if you are taking 15 credit hours as a full-time student, one of your classes each semester will be online.

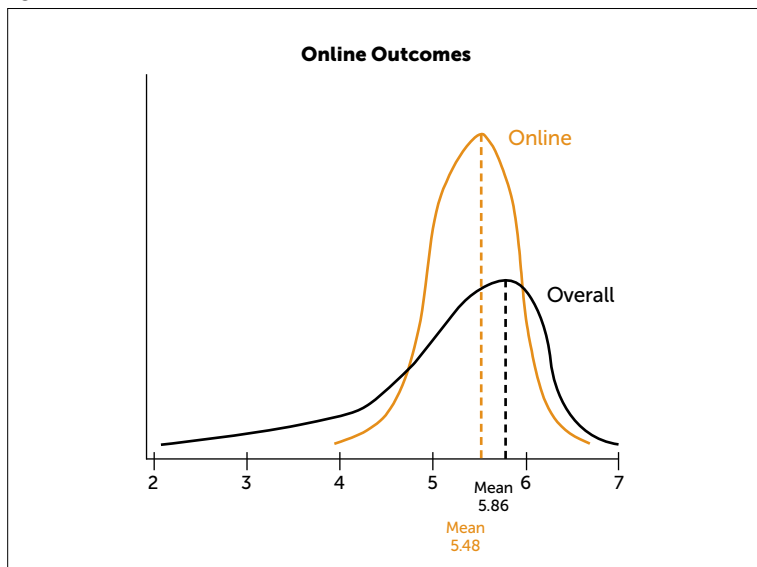
Now, we learned something interesting from our students. If you talk to the students—and not just freshmen but students who have been around for a while and have studied and have taken a number of different kinds of courses—the kind of course they would prefer is the hybrid. They attend class, the faculty member is in the classroom with them, but they also work online with an online instructor. The online

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Figure 4.



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instructor is more like a mentor who watches their work, reads their work, and gives them feedback. The students have flexibility as to when they do the work, but they have to turn the assignments in, and they have to meet deadlines.

Figure 4 is critical to understanding why we are doing what we are doing at BYU-Idaho.

On the X-axis we have a scale from 2 to 7, which is a measure of merit that is based on student evaluation of instructors, of courses, of learning outcomes, and so forth. For on-campus courses, on a 2 to 7 scale, the average course at the university is at 5.86. The black line is the distribution. The mass of the distribution is pretty good, but you do get the tail at the low end. The gold line is the online and hybrid distribution. The average is 5.48, slightly below that of the on-campus courses. The scale is different because the number of students taking online classes is different. But notice the distribution is much tighter around the mean. That is because the experience is predominantly designed into the software. We can evaluate the experience and update, change and modify the courses to make them better by modifying and changing the software. We also can help online instructors get better at mentoring and working with students. And, so, overtime we basically can cut off the low-end tail for online courses.

We feel confident that our online experience can become equivalent in educational outcome to the face-to-face experience with a narrower range around the mean. And, therefore, we can offer to our students the proposition that if they take one online course a semester, it is going to be a good experience educationally.

In fact, what we see in practice is our students voting with their feet. When we open registration, the online courses quickly fill up. It's interesting. Part of it is that online courses help the students manage their schedules. And we use online sections as a kind of buffer. We line up additional online sections and add them if needed. That helps us make sure that our on-campus sections are full. And if we have more demand, we make an online section available. So this process provides a buffer capacity.

We now have about half a dozen instructional designers. We have another three or four people who do software development. We are developing about 14 courses per semester, and we are headed toward 18. Eighteen is the target. We are up to about 80 online courses right now. We are headed to about 140 by 2012, and then we will keep going.

It costs between \$15,000 and \$20,000 to develop an online course, depending on the field. Online courses allow us to increase the university's reach and capacity because they can be somewhat larger than the average size of our on-campus courses, which is 30, and because they do not require bricks and mortar classroom space.

Online courses also give us the flexibility to create a blended or hybrid learning experience. A hybrid course combines a face-to-face experience once or twice a week with the balance of the course hours taught online. Our experience suggests that this format offers advantages in both cost and quality. On the cost side, our regular full-time faculty teach the hybrid courses, so the cost advantage over face-to-face lies in our ability to increase capacity without new investment in classroom space. On the quality side, students seem to thrive with both face-to-face and online delivery in the same course.

These innovations allow BYU-Idaho to lower costs and grow the university so that we serve our mission and educate more students.

▶ KIM CLARK is president of Brigham Young University – Idaho, a position he has held since 2005. Prior to that, he spent his entire academic career at Harvard Business School. He joined the faculty there in 1978 and was the George F. Baker Professor of Administration. From 1995 to 2005, he served as dean of Harvard Business School. Clark has published several articles in the *Harvard Business Review* and other journals, and his books include *Design Rules, Vol. 1: The Power of Modularity* (2000) with Carliss Y. Baldwin, and *Leading Product Development: The Senior Manager's Guide to Creating and Shaping the Enterprise* (1995) with Steven Wheelwright. Clark can be reached at clarkk@byui.edu.